



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R01-OAR-2012-0951 ; FRL- 9778-6]

**Approval and Promulgation of Air Quality Implementation
Plans; Massachusetts; Revisions to Fossil Fuel Utilization and Source Registration
Regulations and Boiler Industrial Standards**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA is proposing to approve several State Implementation Plan (SIP) revisions submitted by the State of Massachusetts. The revisions add new monitoring, inspection, maintenance and testing requirements for certain fossil fuel utilization facilities, rename and clarify stationary source emission reporting requirements, and establish compliance and certification standards for new boilers. The intended effect of this action is to propose approval of the state's revised fossil fuel utilization facility regulation, source registration regulation, and new industrial performance standards for boilers. This action is being taken under the Clean Air Act.

DATES: Written comments must be received on or before **[Insert date 30 days after publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID Number **EPA-R01-OAR-2012-0951** by one of the following methods:

1. **www.regulations.gov**: Follow the on-line instructions for submitting comments.
2. E-mail: **mcdonnell.ida@epa.gov**

3. Fax: (617) 918-0653

4. Mail: "Docket Identification Number **EPA-R01-OAR-2012-0951**", Ida E.

McDonnell, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Permits, Toxics and Indoor Programs Unit, 5 Post Office Square - Suite 100, (Mail Code OEP05-2), Boston, MA 02109 - 3912.

5. Hand Delivery or Courier. Deliver your comments to: Ida E. McDonnell, Manager, Air Permits, Toxics, and Indoor Programs Unit, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Permits, Toxics and Indoor Programs Unit, 5 Post Office Square - Suite 100, (mail code OEP05-2), Boston, MA 02109 - 3912. Such deliveries are only accepted during the Regional Office's normal hours of operation. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding legal holidays.

Instructions: Direct your comments to Docket ID No. **EPA-R01-OAR-2012-0951**. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through www.regulations.gov, or e-mail, information that you consider to be CBI or otherwise protected. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov your e-mail address will be automatically captured and included as part of

the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index.

Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at Office of Ecosystem Protection, U.S. Environmental Protection Agency, EPA New England Regional Office, Office of Ecosystem Protection, Air Permits, Toxics and Indoor Programs, 5 Post Office Square - Suite 100, Boston, MA. EPA requests that if at all possible, you contact the contact listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding legal holidays.

In addition, copies of the state submittal and EPA's technical support document are also available for public inspection during normal business hours, by appointment at the Division of Air Quality Control, Department of Environmental Protection, One Winter Street, 7th Floor, Boston, MA 02108.

FOR FURTHER INFORMATION CONTACT: Brendan McCahill, Air Permits, Toxics and Indoor Programs Unit, Office of Ecosystem Protection, U.S. Environmental Protection Agency Region 1, 5 Post Office Square - Suite 100, (Mail code OEP05-2), Boston, MA 02109-3912, Telephone number (617) 918-1652, Fax number (617) 918-0652, Email McCahill.Brendan@EPA.GOV.

SUPPLEMENTARY INFORMATION:

Throughout this document whenever “we,” “us,” or “our” is used, we mean EPA.

Organization of this document. The following outline is provided to aid in locating information in this preamble.

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I. What Action is EPA Proposing in this Document?

On June 28, 1990 and July 11, 2001, the Massachusetts Department of Environmental Protection (MassDEP) submitted SIP amendments revising 310 CMR 7.04 “U Fossil Fuel Utilization Facilities.” On July 11, 2001, the MassDEP submitted a SIP amendment revising 310 Code of Massachusetts Regulations (CMR) 7.12, “U Source Registration.” On September 14, 2006, the MassDEP submitted a SIP amendment adopting 310 CMR 7.26(30)-(37), “Industrial Performance Standard - U Boilers.” On February 13, 2008, the MassDEP submitted an additional amendment to revise 310 CMR 7.04 “U Fossil Fuel Utilization Facilities” and to correct several typographical errors and to clarify certain requirements to 310 CMR 7.00, 310 CMR 7.12 and 310 CMR 7.26(30)-(37). On January 18, 2013, the MassDEP submitted a letter withdrawing outdated and obsolete regulation submittals and replaced them with effective versions of the above regulations for approval and inclusion into the SIP.

EPA is proposing to approve the February 13, 2008 revisions to 310 CMR 7.04; the July 11, 2001 and February 13, 2008 revisions to 310 CMR 7.12; the September 14, 2006 and February 13, 2008 revisions to 310 CMR 7.26(30)-(37); and the February 13, 2008 revisions to the list of Massachusetts cities and towns that reflect changes in the MassDEP regional boundaries located at the beginning 310 CMR 7.00.

II. What is the Background for the Action Proposed by EPA in this Document?

Section 110 (a)(1) of the Clean Air Act (CAA) requires each state to submit to EPA a plan which provides for the implementation, maintenance and enforcement of each national ambient air quality standard (NAAQS). These plans, generally referred to as the state implementation plans or SIPs, include numerous air quality monitoring, emission inventory, and emission control requirements designed to obtain and maintain the NAAQS within the state. The

CAA requires states to adopt SIP revisions into the state regulations and to submit the revisions to EPA for approval. Section 110(l) of the CAA states that EPA shall not approve a revision to the SIP if the revision would interfere with any applicable requirement concerning attainment of the NAAQS and reasonable further progress, or any other applicable requirement of the CAA. Section 193 of the CAA states that EPA shall not approve a revision to any control requirement in effect before November 15, 1990 in an area which is a nonattainment area for any air pollutant unless the modification ensures equivalent or greater emission reductions of that air pollutant.

EPA has over time approved numerous state regulatory revisions into the Massachusetts SIP. Each regulation performs a different function specifically required by the CAA or determined by the state to be necessary to attain and maintain the NAAQS. Among other requirements, the Massachusetts SIP-approved regulations include 310 CMR 7.04, “Fossil Fuel Utilization Facilities” and 310 CMR 7.12, “Source Registration.”

310 CMR 7.04 regulates the use of fossil fuels by fossil fuel utilization facilities in Massachusetts. The regulation establishes smoke density limits; combustion efficiency requirements; and inspection, maintenance and testing requirements for fossil fuel fired facilities. The use of fossil fuels is a significant source of nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter (PM) emissions. While not specifically required by the CAA, the fossil fuel control requirements in 310 CMR 7.04 reduce the emissions of all the pollutants in Massachusetts.

310 CMR 7.12 requires stationary sources to collect information, keep records and report emissions on a periodic schedule. The MassDEP then uses the emission data to develop the

state's emissions inventory and NAAQS emission control planning requirements. Section 182(a)(3)(B) "Emission Statements" of the CAA establish the federal requirements for stationary source emissions reporting. The section requires permitting agencies to adopt regulations requiring owners and operators of stationary sources of NO_x or VOC to provide a statement showing the actual emissions of NO_x and VOCs from applicable sources.

310 CMR 7.26(30)-(37) establishes emission limits and operational restrictions for new boilers with heat inputs equal to or greater than 10 million British thermal units per hour (MMBtu/hr) and less than 40 MMBtu/hr. Emission increases from the construction of new boilers are currently subject to the MassDEP's 310 CMR 7.02(4) and (5) "Plan Approval and Emission Limitations." The MassDEP adopted 310 CMR 7.02(4) and (5) in an effort to comply with Sections 110(a)(2)(C) and (D) of the CAA. The CAA requires states to adopt procedures that regulate modification and construction of stationary sources as necessary to ensure that NAAQS are achieved, and in particular to prohibit a new stationary source of emissions, such as a new boiler, from emitting any air pollutant in amounts that would contribute to a violation of a NAAQS or interfere with a NAAQS control strategy. For sources that do not meet federal "major source" levels, the requirements for the procedures required by Section 110(a)(2)(C), typically referred to as the "minor new source review program," are codified into the federal regulations at 40 Code of Federal Regulations (CFR) 51.160-164. The MassDEP currently has a SIP-approved minor NSR program (currently entitled "Regulation 2. Plans Approval and Emissions Limitations," approved in 1979), and the state also implements its minor NSR regulations at 310 CMR 7.02(4) and (5).

III. What is EPA's Analysis of Massachusetts's SIP Revisions?

As discussed above, Section 110(l) of the CAA establishes EPA's standard for approving revisions to a SIP (and, for certain pre-1990 requirements, Section 193 may apply as well). The following analysis explains how the SIP revisions meet these standards and may be approved by EPA.

A. 310 CMR 7.04: U Fossil Fuel Utilization Facilities

The June 28, 1990 SIP amendment includes two new provisions to 310 CMR 7.04(2) "U Smoke Density Indicator." The existing SIP provision in regulation 4.2.1 prohibits the burning of fossil fuel oil or coal in any high pressure fossil fuel utilization facility that is not equipped with a smoke density sensing device. New provision 310 CMR 7.04(2)(a) establishes a new heat input applicability threshold level of 40 MMBtu/hr above which fossil fuel utilization facilities are required to install and operate smoke density sensing instrumentation on or after June 1, 1990. New provision 310 CMR 7.04(2)(b) provides the MassDEP the authority to require fuel utilization facility to be equipped with a smoke density sensing device if, in the opinion of the MassDEP, such a device is necessary.

The July 11, 2001 SIP amendment includes two additional provisions to 310 CMR 7.04(2). New provision 310 CMR 7.04(2)(c) allows fossil fuel utilization facilities with energy inputs equal to or greater than 10 MMBtu/hr but less than 40 MMBtu/hr to discontinue and remove smoke density sensing equipment even if required in a previous plan approval. New provision 310 CMR 7.04(2)(d) states that, notwithstanding the requirements of 310 CMR 7.04(2)(a) and (c), new or modified fossil fuel fired facilities may be required to install instrumentation to monitor opacity if subject to New Source Performance Standards at 40 CFR Part 60, subpart D, Da, Db or Dc.

The February 13, 2008 SIP amendment includes a new provision under 310 CMR 7.04 (4)(a) that prohibits the operation of fossil fuel fired facilities with heat input capacities equal to or greater than 3 million British thermal units per hour (MMBtu/hr) unless the facility has been inspected and maintained in accordance with manufacturer's recommendations and been tested for efficient operation at least once every calendar year. The new provisions also require facilities to record the results from the inspection, maintenance and testing and to post the result conspicuously on or near the facility. The provision also includes language that excludes combustion turbines and reciprocating engines from the inspection, maintenance and testing requirements. The inspection, maintenance and testing requirements for these types of sources are already established under state's rules at 310 CMR 7.02(8) and 310 CMR 7.26, "Industrial Performance Standards." Therefore, the inspection, maintenance and testing requirements under 310 CMR 7.04 are redundant and not needed for these source types.

EPA proposes approval of the June 28, 1990, July 11, 2001 and February 13, 2008 SIP amendments to 310 CMR 7.04. EPA has not identified any reason why removing the requirement to operate smoke density sensing devices on small boilers would change how smaller boilers operate or result in any emission increase. In addition, the February 13, 2008 SIP amendment requires boilers with heat inputs capacities over 3 MMBtu/hr to inspect, maintain and test for operational efficiency. This will improve boiler operation and reduce overall emissions. The emission decrease will more than offset any possible emission increase that could result from the June 28, 1990, July 11, 2001 and February 13, 2008 SIP amendments. The amendment is also not inconsistent with the CAA since federal technology-based emission control standards for boilers do not regulate smoke density but rather opacity. EPA finds the

amendments together will improve operations at fossil fuel fired facilities, lower emissions for all pollutants, strengthen the SIP, and be consistent with all federal requirements.

B. 310 CMR 7.12: U Source Registration

The July 11, 2001 SIP amendment includes numerous revisions to 310 CMR 7.12. The amendment renames the regulation from “Certificate Record Keeping and Reporting” to “Source Registration.” The amendment clarifies the regulation’s applicability requirements, reporting deadlines, and information submission requirements. The amendment also includes the addition of new source categories and pollutants subject to the regulation’s reporting requirements. Finally, the amendment establishes reporting procedures for sources who had not previously filed reports.

The February 13, 2008 SIP amendment includes new provisions that require a facility to file a source registration if it operates under the following: 1) a restricted emission status pursuant to 310 CMR 7.02(9), “U Restricted emissions Status” or 7.02(10), “U Modification of Restricted Emissions Status” issued since January 1, 1990, or 2) a federal operating permit approval issued under 310 CMR 7.00, Appendix C.

EPA proposes to approve the July 11, 2001 and February 13, 2008 amendments into the SIP. The amendments do not change the underlying SIP-approved requirements but rather strengthens the state regulations by adding new requirements, expanding the applicability requirements, and reorganizing and clarifying current requirements. The Technical Support Document (TSD) for this proposed rulemaking provides a complete list of revisions proposed by MassDEP and how they comply with federal requirements.

C. 310 CMR 7.26(30)-(37): Industrial Performance Standard - U Boilers

310 CMR 7.26(30)-(37) establishes emission limits and operational restrictions for new boilers with heat inputs equal to or greater than 10 MMBtu/hr and less than 40 MMBtu/hr. Emission increases from the construction of new boilers are currently subject to the MassDEP's 310 CMR 7.02(4) and (5) "Plan Approval and Emission Limitations." As noted above, the MassDEP currently has a SIP-approved minor NSR program (currently entitled "Regulation 2. Plans Approval and Emissions Limitations," approved in 1979), and the state also implements its minor NSR regulations at 310 CMR 7.02(4) and (5).

In July, 2000, the MassDEP proposed to replace the existing plan approval procedures for new boilers with heat inputs equal to or greater than 10 MMBtu/hr and less than 40 MMBtu/hr with new performance standards and compliance certifications requirements adopted under the state's Environmental Result Program (ERP). As described in the state's July 2000 Technical Support and Background Document (TSBD) for the proposed amendment, the purpose of the ERP is to develop process-specific performance standards and compliance certifications that simplify the regulatory process, reduce cost and time for compliance while maintaining effective standards and improving environmental results. On September 14, 2006, the MassDEP submitted the proposed performance standards and compliance certifications requirements for boilers under 310 CMR 7.26(30)-(37) "Industrial Performance Standards - U Boilers" to EPA as a formal SIP submittal.

The new industrial performance standard establishes emission limits and operational restrictions for new natural gas and/or distillate oil fired boilers. In lieu of obtaining a plan

approval under 310 CMR 7.02, owners and operators of a new boiler with heat inputs equal to or greater than 10 MMBtu/hr and less than 40 MMBtu/hr must submit a certification to the MassDEP stating that the new boiler complies with the emission and operational requirements in 310 CMR 7.26(30)-(37).

On February 13, 2008, the MassDEP submitted a SIP amendment revising 310 CMR 7.26(30)-(37). The 2008 SIP amendment includes a new provision that requires an owner or operator of a new boiler subject to 310 CMR 7.26(30)-(37) to submit the certification to the MassDEP prior to installation and operation of the boiler.

The amendments to 310 CMR 7.26(30)-(37) effectively revise Regulation 2, which was approved into the Massachusetts SIP in 1979 in an area that is designated as nonattainment. Consequently, these amendments cannot be approved unless they will ensure equal or greater emission reductions as compared to the existing SIP-approved rules. These rules (specifically, the minor NSR program) must meet the federal minor NSR program requirements at 40 CFR 51.160-164, including the applicability requirements at 40 CFR 51.160(e). Section 51.160(e) requires the MassDEP to describe the types of sources subject to minor NSR and to discuss the basis for determining which facilities will be subject to review.

As discussed in the MassDEP's July 2000 TSBD Document, the proposed Industrial Performance Standard requires the same emission limits, fuel requirements and operational limitations as compared to boilers currently undergoing case-by-case review under 310 CMR 7.02. In addition, the emission limits meet or exceed the requirements for boilers under the

federal NSPS and National Emission Standards for Hazardous Air Pollutants (NESHAP) programs.

The proposed boiler regulation also provides protection, similar to 310 CMR 7.02(4) and (5), that ensures the construction of new boilers will not cause or contribute to a violation of an applicable NAAQS or other control strategy. To ensure emissions disperse properly, 310 CMR 7.26(35) requires minimum stack heights for subject boilers. If the stack height is below minimum height requirements, the provision requires the use of an EPA guideline air quality model to show that the operations of the boiler will not cause the exceedance of a NAAQS. To provide additional safeguards to protect the public, 310 CMR 7.26(35) restricts a subject boiler to the use of inherently low emitting natural gas if the boiler is locating on property adjacent to a street or sidewalk. Section 7.26(35) also provides that “Stacks shall not be equipped with rain protection of a type that restricts the vertical exhaust flow of the combustion gases as they are emitted to the ambient air. ‘Shanty caps’, ‘egg beaters’ and the like are prohibited.” The terms “shanty caps” and “egg beaters” refer to devices that are used to prevent precipitation from entering the stack but which restrict the vertical flow of the exhaust gas stream.¹ In accordance with this understanding, EPA proposes that, for purposes of the federal SIP, the prohibition in Section 7.26(35) should be interpreted to apply to any device for stack rain protection that restricts the vertical exhaust flow of the exhaust stream.

¹ For example, the MassDEP’s “Boiler Environmental Certification Workbook” explains that “Stack heads, devices used to prevent precipitation from entering the stack, must not restrict the vertical flow of the exhaust gas stream. Devices such as ‘shanty caps’ and ‘egg beaters’ are prohibited. Coning of the top of the stack and rain sleeves are acceptable. “ See MassDEP, Boiler Environmental Certification Workbook, page 11, *available at* <http://www.mass.gov/dep/service/online/boilwbk.pdf>. EPA has added this document to the administrative record for this action.

In addition, the monitoring, recordkeeping and reporting provisions throughout 310 CMR 7.26(30)-(37) provides adequate compliance requirements for all emission and operational requirements.

Finally, 310 CMR 7.26(32)(b) requires owners or operators of subject boilers to submit a compliance certification before a new boiler is installed and operational. This provision provides the ability for the MassDEP to prevent installation of a boiler if it may violate a NAAQS or other state emission requirement as required by the federal NSR requirements.

Together, these provisions demonstrate that the proposed SIP amendments will not result in increases in emissions above the current SIP-approved rules or interfere with any attainment strategy. In addition, since 310 CMR 7.26 (30)–(37) applies equivalent emission and operational limitations as compared to boilers currently undergoing case by case review under the current SIP-approved requirements, the amendment ensures equivalent (or greater) emission reductions than the current SIP-approved minor NSR program. EPA concludes the amendments are consistent with federal requirements and should be approved into the SIP.

D. Miscellaneous Changes

On February 13, 2008, the MassDEP also submitted amendment updating the list of Massachusetts cities and towns to reflect changes in the MassDEP regional boundaries located at the beginning 310 CMR 7.00. EPA is proposing to approve the updated list.

IV. PROPOSED ACTION: EPA is proposing to approve the June 28, 1990 and July 11, 2001 SIP amendments to 310 CMR 7.04 “U Fossil Fuel Utilization Facilities.” EPA is also proposing to approve the July 11, 2001 SIP amendment to 310 CMR 7.12, “U Source Registration” and the September 14, 2006 SIP amendment to 310 CMR 7.26(30)-(37), “Industrial Performance Standards –U Boiler.” Finally, EPA is proposing to approve the February 13, 2008 SIP amendment that revises 310 CMR 7.04 “U Fossil Fuel Utilization Facilities,” corrects several typographical errors and clarifies certain requirements to 310 CMR 7.12 and 310 CMR 7.26(30)-(37) and updates the list of Massachusetts cities in 310 CMR 7.00.

EPA is soliciting public comments on the issues discussed in this proposal or on other relevant matters. These comments will be considered before EPA takes final action. Interested parties may participate in the Federal rulemaking procedure by submitting written comments to the EPA New England Regional Office listed in the **ADDRESSES** section of this Federal Register, or by submitting comments electronically, by mail, or through hand delivery/courier following the directions in the **ADDRESSES** section of this Federal Register .

The Agency has reviewed this request for revision of the Federally-approved State implementation plan for conformance with the provisions of the 1990 amendments enacted on November 15, 1990. The Agency has determined that this action conforms with those requirements irrespective of the fact that the submittal preceded the date of enactment.

V. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and does not provide EPA

with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 et seq.

Dated: January 31, 2013

H. Curtis Spalding,
Regional Administrator,
EPA New England.